

## Introduction



The Biological Sciences and Bioengineering Program at Sabancı University has ten faculty members who conduct research on modern biological problems. We offer a curriculum designed to encompass three areas of biological sciences: plant biology, bioinformatics and molecular and cellular biology. Our laboratories have modern infrastructure and cutting-edge research equipment. We are engaged in research and development projects and collaborate with researchers around the world.

## Research Areas

### Molecular and Cellular Biology

There are extensive research on eukaryotic gene expression, with focus on the regulation of NFkB and AP-1 activation and target gene expression by inflammatory cytokines. Stress Induced Signaling is another focus of this area. The research group is working on adaptive responses to oxidative stress in eukaryotic systems and cell death signaling in plant and mammalian cells.

[Click for more info about Molecular and Cellular Biology»](#)

### Plant Molecular Biology and Genetics

Research in plant molecular biology and genetics is attracting increasing attention within the scientific community, because biotechnology research is extensively involved in product development for many agricultural, chemical, and pharmaceutical companies.

[Click for more info about Plant Molecular Biology and Genetics»](#)



## **Plant Nutrition and Physiology**

The group in Sabancı University is mainly investigating micronutrient deficiencies and heavy metal toxicities in crop plants. Special attention is being paid to biofortification of wheat with micronutrients, especially zinc, selenium and iron.

[Click for more info about Plant Nutrition and Physiology»](#)

## **Structural and Computational Biology**

The researchers are interested in structure-function relations of plants metallothioneins, structural analysis of plants TOLL-interleukin I like resistance genes. Functional analysis of plant G-proteins involved in signal transduction are achieved using modeling and synchrotron X-ray diffraction and scattering methods.

[Click for more info about Structural and Computational Biology»](#)

## **Bioinformatics**

The researchers are mainly dealing with applications of data mining and machine learning

techniques to several problems in Bioinformatics. These applications vary from identification of secondary structures in proteins to fold classification problem, from motif determination to biomedical text mining.

[Click for more info about Bioinformatics»](#)

## **News, Seminars & Events**

[Seeing the Invisible with Diffusion-Weigh.. E.Özarlan,Dec 23,L045](#)

[Department of Biomedical Informatics... G. Özer,Dec. 01, 13:40 L030](#)

[Change in Biosafety Law and its Implementing Regulations](#)

[Change in Biosafety Law and its Implementing Regulations](#)

[D. Gözüaçık; Board of Directors Member of the ICDS](#)

[Gown and Cap Return After the Graduation Ceremony](#)

[The Results of Dr. Gürsel Sönmez Research Award](#)

[THE DISTRIBUTION OF GOWNS AND CAPS FOR COMMENCEMENT DAY](#)

[Seminar:Ertugrul M. Ozbudak,Friday, 04 June 2010, FENS 2019, 11:00](#)

[Recombinant Antibodies for Botulinum Neurotoxin Immunotherapy Seminar](#)

[2009-2010 Academical Year 'Dr. Gürsel Sönmez Research Award'](#)

[TODAY: SABANCI-CAMBRIDGE NANOMATERIALS WORKSHOP](#)

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